

Reconfigurable Vivaldi antenna with tunable stop bands

Abstract

A novel Vivaldi antenna is presented with tunable stop bands. A microstrip line resonator is coupled to the tapered slot, with three varactors used for tuning. The stop band can be tuned between 2 GHz and 7 GHz, to give a very wide tuning ratio, of 3.5:1. Good agreements between simulated and measured results are observed, which verify the design concepts.